

Call to Claim Your Prize: Perceived Benefits and Risk Drive Intention to Comply in a Mass Marketing Scam

Stacey Wood
Scripps College

Pi-Ju Liu
University of California, San Francisco

Yaniv Hanoch
University of Plymouth

Patricia M. Xi and Lukas Klapatch
Claremont Graduate University

Mass marketing scams extract an enormous toll, yet the literature on scams is just emerging. In Experiment 1, 211 adults reviewed a solicitation and rated their intention of contacting an “activation number” for a prize. Scarcity and authority were manipulated. Many (48.82%) indicated some willingness to contact to “activate” the winnings. Intention of responding was inversely related to the perception of risk ($b = -.441, p < .001$) and positively associated with perception of benefits ($b = .554, p < .001$), but not with the experimental condition. In Experiment 2, 291 adults were randomly assigned to one of the three conditions (low, medium, or high activation fee), and were asked to report willingness to contact. Activation fees decreased intent to contact, but percentages remained high (25.70%), with higher perception of risk reducing contact rates ($b = -.581, p < .001$), and benefit perception increasing intent to contact ($b = .381, p < .001$). Our studies indicate that consumers are responding to perceived risks and benefits in their decision-making, regardless of persuasion elements used by scammers. In summary, our studies find that consumers with lower levels of education and high perception of benefits are at increased risk for mass marketing scams.

Keywords: fraud, financial crimes, persuasion, numeracy, sweepstakes

Mass marketing scams (MMS) cost consumers billions of dollars worldwide, with the Nigerian scam alone totaling \$12.7 billion in 2013 (“*Smart people easier to scam*,” 2014). Furthermore, MMS are linked to physical risk or harm, loss of homes, depression, and even contemplation of (and actual) suicide (Button, Lewis, & Tapley, 2014; Fraud Advisory Panel, 2015). With soaring costs and millions of people being affected, government agencies (e.g., FBI), third sector organizations (e.g., AARP), consumer organizations (e.g., Action Fraud), and international units (e.g., The International Mass-Marketing Fraud Working Group) have identified MMS as a major international crime problem. Yet there is little empirical data regarding the psychological factors that render some individuals more susceptible to these scams and tactics employed by the perpetrators.

MMS refer to any type of fraud scheme that uses one or more mass-communication techniques or technology including the In-

ternet to present fraudulent solicitations (The United States Department of Justice, 2015). In general, MMS fall into three categories: (1) advance-fee fraud schemes, (2) bank and financial account schemes, and (3) investment opportunities. Advance-fee fraud schemes are a type of scam that is based on the concept that the victim is promised a substantial benefit, such as a sweepstakes winning, inheritance, or some object of value, but must pay a fee (e.g., “activation,” “tax,” or “shipping”) or a series of fees before they can receive the benefit.

Advance-fee fraud schemes employ basic principles of persuasion to induce compliance with a small request. Potential victims are typically asked to provide some contact information by way of an e-mail or phone number for the possibility of receiving a (financial) prize. Victims’ initial compliance can serve as a foot in the door (FITD; Freedman & Fraser, 1966) for the scammers to hook potential victims and later make additional requests, employing a larger arsenal of techniques to persuade (and at times, coerce) the person. Individuals who make that initial contact are often placed on a “suckers list,” and their information can be bought and sold as a commodity. In extreme cases, victims are unwittingly used as “money mules” themselves, placing them at risk for criminal prosecution (Charles, 2014). The current experiments were specifically designed to examine the earliest stages of this process, as it is the least cognitively demanding and appears innocuous because these solicitations often only ask individuals to provide “harmless” information and make a small behavioral commitment (e.g., a phone call).

Stacey Wood, Department of Psychology, Scripps College; Pi-Ju Liu, Department of Nursing, University of California, San Francisco; Yaniv Hanoch, Department of Psychology, University of Plymouth; Patricia M. Xi and Lukas Klapatch, Department of Psychology, Claremont Graduate University.

Correspondence concerning this article should be addressed to Stacey Wood, Department of Psychology, Scripps College, 1030 Columbia Avenue, Claremont, CA 91711. E-mail: swood@scrippscollege.edu

To date, MMS have received scant attention from behavioral economists or psychologists, and there is a paucity of data on the underlying factors involved in responding to MMS. However, research on the topic is emerging, due to its financial and social implications. The social problem of scams also presents an opportunity to test models of decision-making and persuasion in field studies. Most papers to date have been conceptual reviews applying well known psychological theories to the problem of MMS rather than empirical investigation (Lea, Fischer, & Evans, 2009). Capitalizing on dual-process models, a number of researchers have suggested that deceptive pitches target automatic and intuitive System 1 processing, and have developed models that emphasize the interaction of persuasion and the cognitive capabilities of the target (Drew & Cross, 2013; Jones, Towse, & Race, 2015; Wood, Hanoach, & Woods, 2016; Wood & Lichtenberg, 2017). Other models have been proposed highlighting visceral influences of persuasion (Langerferfer & Shimp, 2001). For example, on some solicitation letters, benefits (i.e., large financial prizes) are often presented in bold, enlarged, colorful fonts. These presentations are specifically designed to highlight the benefits of the solicitation and activate affective processes. Common tactics from Cialdini's model of persuasion and social influence have also been proposed (Cialdini, 2006; Fischer, Lea, & Evans, 2013; Langerferfer & Shimp, 2001). This work emphasizes persuasion elements of the solicitation materials versus individual differences of the consumer, and these elements include the components of authority or credibility (e.g., from a legitimate source, like "IRS" scams), scarcity (e.g., "act now," "only 3 left at this price"), social proof (e.g., "meet previous winners!"), reciprocity (e.g., may give a "free" extra gift), and liking (such as an affinity scam for a group like a charity or veterans), as well as some small behavioral commitment (e.g., "call now!").

In a recent paper incorporating a mixed method approach, Fischer and colleagues (2013) interviewed scam victims, conducted a content analysis of scam materials, and carried out a field study with mailings out to the community. The authors reported that each of these approaches provide some insights into the psychology of scams, but were not necessarily consistent. For example, high affect/positive words, authority, and scarcity were frequently employed according to both the content analysis and in-person interviews. However, in the field test, there were no reliable effects of reward size or authority on return rates. Approximately 15.8% of their sample indicated that they had complied with a scam in the past, suggesting that a significant percentage of the population is susceptible to scams and are likely to respond to them.

While the work of Fischer and colleagues (2013) is important, it did not examine any individual differences that could help explain why some respond to scams and some do not. Previous work on financial exploitation and fraud, for example, has revealed that individual difference variables—such as numeracy and risk perception—can help explain differences in risk taking behavior (National Research Council, 2003; Peterson et al., 2014; Wood et al., 2014; Wood, Liu, Hanoach, & Estevez-Cores, 2016). Numeracy and financial literacy have been found to be related to a wide range of financial outcomes, including increased retirement savings, and less vulnerability to financial exploitation in older adults (Wood & Lichtenberg,

2017). Negative social interaction may increase vulnerability secondary to a lack of a sounding board regarding a financial decision, or increase willingness to call a stranger listed in a solicitation (Liu, Wood, Xi, Berger, & Wilber, 2017). Thus, individual differences such as risk perception, numeracy, loneliness, and general financial status may influence an individual's decision to respond to MMS solicitations.

Advance-fee scams such as sweepstakes solicitations differ from other scams in several important ways. Sweepstakes scams use the lure of a reward to drive behavior, and employ some element of risk assessment. In phishing scams, on the other hand, the victims are unaware that they are targets. In sweepstakes scams, the respondents know that they are contacting some sweepstakes company, even if they are ultimately deceived regarding its legitimacy. In these scams, individuals must weigh the potential for risks with the benefit of winning a substantial prize. Thus, the decision to respond to MMS may be mainly driven by the perception of the potential benefits and risks of the particular solicitation (Cialdini, 2006).

Jones et al. (2015) have proposed a three-factor model to understand the e-mail fraud decision making context. Their model included (1) persuasive techniques employed by the sender, (2) cognitive make-up of the user (working memory capacity, self-control, inhibition), and (3) UserX, the human-computer interaction (Jones et al., 2015). In the current series of studies, we apply this model to the social problem of MMS victimization. We developed a prototype sweepstakes solicitation based on a review of the structure and content of a sample of 25 advance fee type scam solicitations obtained from the Postal Inspector in Los Angeles, California. These solicitations frequently contained elements such as credibility/authority ("We obtained your name from Target"), scarcity ("respond by June 1st to claim your winnings"), and a small request for a potentially large reward ("call to activate your winnings").

In Experiment 1, the persuasion elements of scarcity (time limit: high vs. low) and authority (brand name: high vs. low) were manipulated. We collected information regarding the participants' perception of the potential benefits and risks of the solicitation as both a quantitative rating and a qualitative statement. Experiment 1 also included individual difference measures of subjective numeracy, social isolation, demographic variables, and financial status.

In Experiment 2, we created a manipulation requesting an activation fee (3 conditions: none at \$0, low at \$5, and high at \$100) in the original solicitation. In this study, we used a high authority, high scarcity solicitation for all conditions. Experiment 2 included identical individual difference measures as well as a few additional questions regarding financial status (described below).

We predicted a relatively low base rate of intention to respond (5%–10%) with increased intent to contact in the high authority/high scarcity conditions. We predicted a decrease in intent to contact the MMS solicitation with the addition of an activation fee. Finally, we predicted that individuals' rating of risks and benefits of the offer as well as lower numeracy, increased isolation, and lower financial security would be related to increased likelihood of contacting the MMS solicitation.